

Tactical Reconnaissance In Peace Operations: Implications For The Future

**A Monograph
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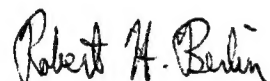
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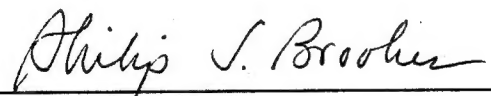
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ABSTRACT

TACTICAL RECONNAISSANCE IN PEACE OPERATIONS: IMPLICATIONS FOR THE FUTURE by MAJ Douglas J. Morrison, USA, 58 pages.

Peace operations are becoming more common place since the disintegration of the Soviet bloc. Though not its primary mission, the Army has an emerging role in peace operations. Current doctrinal writings focus on the geostrategic implications of these emerging military operations. This leaves a void for the tactical commander charged with achieving success for U.S. interests. Under these conditions, the tactical commander has a pressing need to obtain critical information. The information required is obtained through tactical reconnaissance.

The monograph first presents the six fundamentals of reconnaissance and the three related missions of route, area, and zone reconnaissance. Next, based on the importance of obtaining information to support tactical decision making by the commander, the fundamentals are applied to four peace operations (Dominican Republic, 1965-66; Beirut, 1983; Iraq, 1991; and Somalia, 1993) illustrating how tactical reconnaissance can hinder or help peace operations. Three trends emerge. The current doctrinal focus on the six reconnaissance fundamentals is sound. The fundamentals are the key to successful peace operations. Also, well trained units can execute tactical reconnaissance during peace operations. Finally, the techniques and focus in peace operations are what is different.

After analyzing these four operations based on the fundamentals of reconnaissance, several conclusions emerge. Reconnaissance doctrine must expand from the fight for information paradigm of the last fifty years to include the varying information requirements of peace operations. These include: social, cultural, environmental, humanitarian, and military aspects of an area of operations. Further, flexible, mentally agile leaders who execute reconnaissance tasks based on the fundamentals are critical to the success of peace operations.

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"You can never do too much reconnaissance."¹

GEN George S. Patton, Jr.

I. INTRODUCTION

The art of reconnaissance has existed for centuries. Theorists including Sun Tzu, Clausewitz, and Jomini have written about the need for reconnaissance in order to provide the commander with information about the enemy and to reduce the fog of war. Reconnaissance could be considered the most important branch of military art. Armies have continually required information about the enemy, terrain, and infrastructure of areas of operation. Scouts mounted or dismounted were used to reconnoitre. Hussars or cavalry provided security and information on enemy dispositions in advance of the main body forces. Specifically trained officers moved about the battlefield obtaining vital information for the commander. On the American frontier, U.S. Army cavalry units secured the westward migration and conducted reconnaissance to satisfy traditional information requirements. The age of mechanization, altered the mode of transportation, but the focus of reconnaissance remained the same; to gain useful and sometimes vital information for the commander.

For the last forty-five years, the U.S. Army has focused professionally on mid- to high-intensity conflict with the former Soviet Union or a regional power such as North Korea, Iran, or Iraqi. U.S. Army combat operations in Europe during World War II, training at the Combat Training Centers

(NTC/CMTC/JRTC) and Operation **Desert Storm** have focused reconnaissance doctrine solely on combat operations. Current and emerging doctrine fails to address tactical reconnaissance in operations other than war (OOTW). In this environment of conflict, the distinction between combat and noncombat becomes blurred. The goal of deterring war and resolving conflict by promoting peace becomes paramount, and is achieved through military operations including peacekeeping, peace enforcement, and peace making (peace operations).

These operations are becoming more common since the disintegration of the Soviet bloc. Operations in Bosnia, Somalia, Haiti, and Cambodia demonstrate how the distinction between peacekeeping and peace enforcement blur the difference between non-combat and combat.² Doctrinal writings focus on the geo-strategic implications of these emerging military operations rather than the techniques and procedures necessary for successful execution of such operations. This leaves a void for the tactical commander charged with achieving peace making results. Proper tactical reconnaissance is still necessary for these operations to be conducted successfully. Since our current reconnaissance doctrine and studies of reconnaissance fail to address the techniques and procedures of these operations, then analysis and recommendations are required.

Conflict is defined not in terms of intensity, but by the nature of the conflict and the elements of national power found to be most effective.

Secretary of Defense Aspin considers peace operations a job for the Army.³ The Army is working on Field Manual (FM) 100-23, Peace Operations and has published Field Manual (FM) 7-98, Operations In A Low-Intensity Conflict, in which reconnaissance is not specifically addressed. Tactical reconnaissance doctrine focuses primarily on combat and cavalry operations, FM 17-95 Cavalry Operations and scout operations FM 17-98 Scout Platoon. Operation **Desert Storm** set the tone for quick, decisive military action with limited loss of American lives.⁴ This standard of performance requires specific, in-depth information concerning an area of operation and the enemy. This paper attempts to analyze tactical reconnaissance in light of these emerging "peace operations" as defined in JCS Pub 3-07 (Test), Doctrine for Joint Operations in Low-Intensity Conflict.

Changes in political priorities have led to reductions in manpower and budgets. The Army will have fewer resources and units with which to accomplish peace operations. The Army cannot afford to dissipate resources to conduct special training. Therefore, the Army's focus for tactical reconnaissance must be on trained, disciplined, and ready forces which have a clear, defined mission. Units must use the time tested fundamentals of reconnaissance: maximum reconnaissance force forward, orient on the location or movement of the reconnaissance objective, report all information rapidly and accurately, retain freedom of maneuver, gain and maintain enemy contact, and develop the situation rapidly.⁵

This analysis evaluates tactical reconnaissance doctrine during peace operations to determine effectiveness. By applying the fundamentals to several historical examples of peace operations, we can determine what must be done effectively in future operations to insure success. Successful peace operations require proper reconnaissance and surveillance. A lack of accurate tactical information seriously handicaps the commander. Successful tactical reconnaissance incorporates the fundamentals of reconnaissance during planning and execution.⁶ Good tactical reconnaissance and surveillance involves the synchronization of these fundamentals. The information obtained contributes to the commander "seeing" the battlefield or operational situation. The commander can then focus necessary resources to conduct operations in accordance with the mission. The study concludes with an overall view toward implications for the Army concerning tactical reconnaissance during peace operations.

Information is power, the raw material of tactical decision making. Every commander must have information concerning not only his own forces, but timely accurate information about terrain, resources, and enemy dispositions within an area of operations. Reconnaissance units must recognize the unique perspective peace operations place on this information. The commander's priority information requirements become less black and white and more complex; an example is local environmental and humanitarian conditions. The local population, whether hostile or

friendly, can influence the validity or relevance of information gained. Therefore, during peace operations, "personal observation" becomes critical so no doubt exists to the accuracy of the information.⁷

Reconnaissance involves continuous, active operations to gain information. In addition to the six fundamentals critical to success, reconnaissance operations involve two distinct methods of collection: reconnaissance by stealth and aggressive reconnaissance by fighting for information.⁸ Reconnaissance and surveillance involves the use of stealth, dismounted operations, patrolling, observation posts, and surveillance systems (OH-58D observation aircraft, Unmanned Aerial Vehicles-UAVs, and ground surveillance radar-GSR). Operations focus on gathering information through deliberate, precise, and nonprovoking actions. This non-aggressive method of reconnaissance is most applicable to peace operations. The goal is to gain useful information without alienating the population or increasing the intensity of the conflict.

Current doctrine does not provide this emphasis. Aggressive reconnaissance is the legacy from World War II, our combat training centers, and Operation **Desert Storm** which permeates current doctrine. It involves a force prepared and willing to fight for the required information. The force concentrates on developing the situation quickly and attacking the enemy, especially enemy security and reconnaissance forces, when necessary.⁹

Tactical reconnaissance doctrine currently emphasizes this method which is based on heavy division cavalry squadrons and the armored cavalry regiment. These formations take advantage of sophisticated technology to identify weak points in the enemy and either exploit or pass through follow on forces. The 2nd Armored Cavalry Regiment conducted this type of action during Operation **Desert Storm**. Peace enforcement/making operations may use this method since both closely resemble combat operations.¹⁰

Tactical reconnaissance techniques include: aerial, mounted, and dismounted methods. Surveillance remains the primary task during any reconnaissance mission. Dismounted patrols operate observation posts (OPs), conduct operations requiring stealth, and operations in restrictive terrain such as mountains, jungles, or urban areas. Mounted operations provide increased range, sustainment, protection, and in some cases an increased capability such as thermal imaging. Further, when speed is of the essence, mounted or aerial means are used. Moreover, in desert, open, or extended operations mounted reconnaissance provides the means to fight for information if necessary. Aerial systems provide redundancy to ground operations, flexibility in employment, and allow scouts to conduct surveillance from a variety of locations and perspectives. Regardless of the methods used, effective, long range communications enhance the mobility of the reconnaissance force.¹¹

The techniques listed do not replace the soldier's natural senses of sight, hearing, smell, and touch. The level of risk and security necessary must be balanced against the criticality of the mission. The scout must use all available resources to accomplish the reconnaissance objective. The techniques must be trained and practised. Rehearsed techniques, situational awareness, and focus on the objective contribute to mission success.

During peace operations, missions vary, but focus, broadly on area, zone, and route reconnaissance with only the reconnaissance objective changing.¹² Route reconnaissance provides precise, detailed information concerning a specific route including the suitability of the route, if the route is clear of obstacles, and whether it is clear of enemy forces. The reconnaissance includes the terrain on either side of the route which could influence movement along the route.¹³ A zone reconnaissance focuses on the routes, terrain, resources, and enemy forces within a specific zone defined by lateral boundaries. Commanders assign this mission when information concerning the enemy, trafficability, and routes in a zone are required prior to moving through or into the zone.¹⁴ Area reconnaissance involves an attempt to gain information about terrain, resources, or enemy activity within a specific area. The area may be defined by an urban area, woods or forest, ridge or hill mass or some other feature the commander requires information prior to occupying, bypassing, or passing through.¹⁵

Each of the reconnaissance missions may constitute a single mission or may be part of an overall reconnaissance operation such as conducting a route and area reconnaissance as part of a zone reconnaissance. The critical tasks of each reconnaissance mission are listed at Appendix A. Several critical principles apply to every reconnaissance mission. Soldiers must focus on the reconnaissance objective, reporting exactly what they see quickly and accurately. During peace operations overt means may be required based on the ROE, the type of operations, and political restrictions. The critical point is to "see" the battlefield and observe as the commander's eyes in the field.¹⁶

Peacekeeping normally involves operations conducted with the consent of the belligerent parties. Forces maintain a negotiated truce and help promote diplomatic initiatives focused on establishing long term peace in the area. Operations include interposition between belligerents and observation of cease fire or truce lines. Peace making involves diplomatic and/or military actions to provide an end to conflict and a resolution of the issues which led to conflict. Peace enforcement focuses on military intervention to forcibly restore peace between belligerents engaged in combat. Measures could be in support of diplomatic efforts, but may not have the acceptance of the parties involved.¹⁷

According to the Peace Keeper's Handbook, peacekeeping operations cannot obtain "military intelligence information", but can

obtain "military information".¹⁸ The critical requirement of any reconnaissance mission always is the reconnaissance objective--gaining the information required by the commander. Objectives may focus solely on unit dispositions and equipment of both belligerents. Impartiality may be maintained by providing the information to all belligerents. Reconnaissance may be restricted for example, to information gained by patrolling--both mounted and dismounted. Patrolling provides the primary means to obtain information overtly, while maintaining a presence between conflicting parties.¹⁹

Several key points emphasize the relevance of this study. Doctrine focuses on overwhelming speed, maneuver, and firepower supported by aggressive reconnaissance. Peace operations require a level of restraint in some instances, forces can only fire in self-defense, tied to the rules of engagement. Impartiality becomes a key contributing factor in the shift of the tactical reconnaissance objective. Ultimately in any peace operations the force must have the capability and will to prevail in any confrontation to maintain the peace between belligerents. Without proper reconnaissance, this approach may invite failure in some instances. Information becomes a significant element of power and leverage. Technology has increased the importance of certain facilities so tactical reconnaissance objective may shift from purely enemy forces to include public utilities such as power plants, water plants, and broadcast stations.²⁰ Further, cultural elements of the

population, health conditions, and necessities of life become essential elements of information and possible reconnaissance objective.

Our tactical reconnaissance doctrine must be ready for combat and peace operations simultaneously. Current doctrine correctly focuses on the fundamentals of reconnaissance, but requires modification to include peace operations. The line between war and peace operations is not always clear. Peace operations are more likely to occur than war. Further, peace operations are emerging as primarily an Army mission.

II. ANALYSIS OF TACTICAL RECONNAISSANCE AND PEACE OPERATIONS

"For to win one hundred victories in one hundred battles is not the acme of skill. To subdue the enemy without fighting is the acme of skill."²¹
Sun Tzu

Theoretically, two precepts closely link the discussion of tactical reconnaissance and peace operations. The first is Clausewitz's view that military action is an extension of policy by violent means. The second addressed by Sun Tzu and others that information is critical to the successful execution of military operations.²² Both factors must guide tactical reconnaissance during peace operations.²³ The significant influence of policy manifests itself through the restrictions placed on the use of force in the rules of engagement (ROE). Confusion occurs when the overall missions given to tactical forces remain unclear or change frequently throughout an operation. These considerations influence the collection of information by tactical reconnaissance conducted during peace operations.

Objectives for peacekeeping may be totally different than for a peace enforcement or combat type operation. Information requirements for peace operations may change during the mission. These changes may necessitate additional training or a more innovative way of employing tactical reconnaissance assets. Significantly, the force must have an adequate mandate, clear and appropriate ROE, inherent force protection, including weaponry for defensive purposes, and a clear mission. With these conditions understood, the problem becomes the proper application of the doctrinal fundamentals of reconnaissance.

Reconnaissance by its very nature is a stressful and difficult undertaking. Competent, proficient leaders and soldiers focus on the reconnaissance objective. Political restrictions specifying the conditions and limitations on the use of force only increase the stress, affect morale, and influence tactical decisions.²⁴ Marine operations in Lebanon from 1982-83 illustrate the stress and strain on tactical reconnaissance. When the Marines' mission changed putting the force in greater risk, while the ROE remained basically the same, reliable tactical reconnaissance became an absolute necessity.²⁵ When Marine reconnaissance failed to provide effective security and adequate warning, disaster was inevitable.

The Marines first entered Beirut in September 1982 as part of the Multinational Force to conduct peacekeeping operations. The Marine Amphibious Unit (MAU) operated under fairly loose rules of engagement

(ROE). The Marines were not to disarm anyone but to set up a buffer zone between Moslem civilians north and the Israeli army to the south, of Beirut International Airport (BIA).²⁶ The initial ten-point ROE was very passive in nature and included three key elements for the use of force. Use of force would be restrained and defensive in orientation. Marines could return fire in self-defense, pre-emptively fire if "hostile intent was clear", or to assist the withdrawal of friendly forces.²⁷

After the American embassy was destroyed by a terrorist truck bomb in April 1983, the MAU instituted two different sets of ROE. For embassy security forces, the "Blue Card" ROE emphasized a more flexible use of force permitting a Marine to fire if he "perceived hostile intent".²⁸ In contrast, the Marine airport compound emphasized a more controlled use of force was essentially based on the initial ROE ("White Card" ROE) which emphasized the defensive use of force.²⁹ Unfortunately, neither ROE specifically dealt with possible terrorist incidents nor was one ever issued.

Problems with the ROE resulted not only from difficulty the average Marine had in understanding and remembering all ten points, but the confusion Marines had in applying the dual ROE. Since Marine forces were rotated between the American and British embassies and the BIA compound, security patrols had to keep in mind two different and complicated ROE. Before firing, warnings were required in Arabic and French. Any response to an attack or hostile threats was to be

"proportional" or "in kind".³⁰ These provisions confused the Marines. Further guidelines were required to determine what constituted in kind or proportional force. Moreover, the ROE precluded any offensive action. This specifically hindered reconnaissance since aggressive combat patrols were considered offensive missions.

Along with the confusion over complicated ROE, the Marines in June 1983 began actively to support the Lebanese Armed Forces (LAF). Initially, Marine forces set up reconnaissance and security positions north and east of BIA. Joint checkpoints and OPs were operated with elements of the LAF. Marine units also began joint patrols with the LAF in late June and early July. Islamic militia groups came to view these Marine actions as partisan participation in the conflict. Continued U.S. political support of Israel and the failure of Marine forces to effectively halt Israeli patrols near BIA reinforced this belief, leaving the Marines as a prime target for terrorist attacks.³¹ The militia and terrorist factions would use any means necessary to drive the peacekeeping forces out of Lebanon.³² These events actually changed the Marine mission from peacekeeping to peace enforcement. Further, the resulting security threat required the Marines to refocus their tactical reconnaissance in an effort to identify and track Islamic terrorist factions operating around Beirut.

Specific intelligence concerning terrorist activities was lacking due to a shortage of accurate information and collection assets available to

gain the information. The MAU had few internal intelligence or reconnaissance assets except a small force reconnaissance element, four AH-1 Cobra attack helicopters, a small signal intelligence unit (SIGINT), and several counter-intelligence (CI) teams. These were later augmented by Navy SEALs and an Army counter-fire radar unit. The MAU itself was too small to conduct any type of extended operations beyond the airport area, much less secure it.³³ Due to increased hostility from the local militias, the resultant political concern over increased casualties, and ROE which precluded effective armed response until Marines were actually attacked, the Marines stopped patrolling and took up static defensive positions around BIA.³⁴

The Marines attempted to establish contact with Islamic militia units and to maintain contact with Lebanese intelligence services, police and security forces. Despite receiving information from these sources, the Marines felt they were not getting the entire picture. Given the tactical restrictions, it was difficult to determine how valid the information was.³⁵ Patrols began to see evidence of armed "civilians" returning to the village of Hays as Salaam, northeast of BIA. The indications were that these individuals were members of PLO or terrorist groups who had infiltrated back into the area around the airport. These groups were conducting reconnaissance and other activities to protect their interests in the villages near the airport.³⁶

The Marines could not fight for information or aggressively seek out the enemy due to the ROE restrictions on offensive operations around the airport positions. To maintain the image of impartiality, contact with the Israelis was not allowed. Further limitations on the use of forces prevented checkpoints or OPs beyond the airport perimeter or aggressive patrolling into the village areas north of the airport where the young "locals" were operating.³⁷ The shortage of critical information was evident in March and April 1983. The MAU intelligence officer had information concerning terrorist activities in Syria and Libya, but had no idea what the situation was outside the BIA perimeter. Further Lieutenant Colonel Anderson, the Battalion Landing Team (BLT) commander, indicated that no capability existed to understand how the people felt or what was going on in the villages around BIA.³⁸

Even after the terrorist truck bombing of the U.S. embassy in April 1983 tactical reconnaissance did not focus on the possibility of a terrorist attack. The Marines developed a comprehensive reconnaissance plan, but its' primary focus was on the relatively conventional forces of the Islamic militias. The MAU rated this information and conventional intelligence as "excellent", but terrorist information was rated "poor".³⁹ Daily helicopter flights were tasked to conducted aerial reconnaissance around the Marine perimeter during missions in and out of the airport. Every helicopter crew was debriefed after each flight. Observation posts were set up by SEAL

teams in the mountains 15-20 kilometers northeast of the airport. The Marines ability to develop the situation, get maximum reconnaissance out, gain and maintain contact while maintaining freedom of action against the Islamic factions and terrorists, was limited.⁴⁰ By September 1983, relevant and accurate information indicated the threat to the Marines had increased significantly. However, the focus was on the armed militia threat since artillery was pounding the airport compound daily. It was not until 23 October the day of the bombing, that CI teams contacted actually the Druze militia to determine the extent of the terrorist threat to the Marines.⁴¹

COL Geraghty, the MAU commander, provided the focus for reconnaissance collection by identifying information requirements. He failed to take actions which would have contributed to or improved MAU/BLT security.⁴² The force did not have a reconnaissance and surveillance plan which comprehensively covered threat courses of action. As MAU commander, COL Geraghty should have focused all available reconnaissance assets on both militia and terrorist forces while using other innovative ways to obtain critical information thus enhancing Marine security. Intensified efforts to increase information sources or human intelligence (HUMINT) near Marine positions may have been useful. COL Geraghty could have attempted to gain information from other sources such as the other Multinational Force contingents or local militia forces much earlier than occurred. Unfortunately, no formal means existed to coordinate

missions or pass intelligence information between the British, French, Italian, or U.S. contingents.⁴³

A quick way to have increased security within the Marine perimeter without significant effort would have been the establishment of mobile reconnaissance patrols armed to stop any threat, under the conditions of the ROE. Covert contacts with the local militia might have been difficult but may have helped. The mission to the Druze militia was initiated by the MAU staff not by the commander.⁴⁴ COL Geraghty should have the ROE to the limit by putting out combat patrols to provide observation and early warning despite restrictions to the contrary.⁴⁵ Further, he could have contacted the Israelis indirectly and asked for their assistance. These actions may have clarified the threat situation, terrorist intentions and capabilities without hindering, what was politically a "presence" mission.⁴⁶

The Marines might have learned something from observing the reconnaissance techniques of the other contingents in the Multinational Force. Italian, British, and French forces had learned from their colonial experience that static positions were vulnerable to hit and run attacks or protracted sieges. British forces also had learned much the same thing in Northern Ireland where they had spent over fifteen years trying to maintain order. Italian and British forces conducted daily patrols and maintained a relatively non-partisan position in the civil war. Normally their patrols consisted of mine-proof vehicles, soldiers with body armor, and weapons.

The Marines failed to display a flexible and imaginative approach to solving the information and reconnaissance problem. A shift in mind set from conventional military operations was required. Peace operations may be ambiguous and require restraint one moment and the use of force the next. Operating in this "fog of war" with uncertain missions, unpredictable enemies, and unclear threat requires the commander to exhibit flexibility. Psychologically, the commander must be prepared for a different environment and threat. Reconnaissance provides the information necessary for the commander to see clearly an unconventional situation.

Senior leadership must set a clear mission, supported by clear and sensible ROE which allow tactical commanders flexibility in defending themselves, and a realistic task organization to accomplish the mission. While not mitigating tactical leaders from executing missions properly, at least the proper conditions would be set. Tactical reconnaissance, by nature a stressful undertaking, can be severely hampered by overly restrictive task organization, rules, and guidelines. The Beirut experience illustrates the need for additional training to focus reconnaissance on non-standard indicators. Part of the answer may be in emphasizing "versatility" during training. This ability by tactical units to adapt to differing missions and requirements is a must for peace operations. Forces must be able to do a variety of missions and quickly adapt to changing situations. The critical component to this reaction becomes reconnaissance, conducted to

obtain critical information regardless of any political restrictions governing the situation.⁴⁷

Recent combat action during Operation **Restore Hope** in Somalia, further illustrates how poor tactical reconnaissance can lead to failure of a peace operation. Similar to the Beirut failure, the difficulties in Mogadishu can be attributed to a mission which had gone from clearly peacekeeping and humanitarian assistance to peace enforcement, necessitating a change in tactical organization and focus.

When operations first began, reconnaissance preceded every tactical operation conducted by the 10th Mountain Division to secure villages in the Somalia countryside. These were peace enforcement and peace keeping operations to support humanitarian relief efforts.⁴⁸ Once security was established, movement of humanitarian aid began to those areas. Reconnaissance focused on aggressive patrolling to deter violence, maintain freedom of movement, infrastructure assessment, assessing aid requirements, and uncovering/seizing weapons caches.⁴⁹

Significantly, the following lessons were developed concerning reconnaissance: traditional war fighting considerations failed to develop the unique character of the operation; a different focus was required for military, paramilitary, and non-governmental organizations; reconnaissance must focus on the infrastructure including ports, small villages, nomadic camps, and cultural peculiarities and ethnic boundaries.⁵⁰

U.S. forces turned over operations to the United Nations command (UNISOM II) in May 1993, maintaining only a Quick Reaction Force (QRF) composed primarily of light infantry from the 10th Mountain Division and aviation assets. After violence erupted in June 1993 during which twenty-four Pakistani troops were killed, daily route reconnaissance stopped to enhance force protection. Unfortunately, the QRF was isolated at the airport with its primary means of employment either by truck or helicopter.

To be effective, the force would have to deploy through the city over narrow and winding streets. The force would need to reconnoitre routes for timing, obstacles, possible ambushes, and for return routes back to the airport. Ideally, a daily presence along designated routes would accomplish these tasks. Due to increased violence on the streets and a growing concern in Washington over casualties and force protection (no armor was available), the force did not conduct aggressive route and area reconnaissance to ensure freedom of maneuver and rapid reaction should the need arise.⁵¹

The QRF was alerted on 3 October to assist a Ranger mission in downtown Mogadishu. A relief column containing Rangers and a company from the QRF task force (2-14 IN) departed the airport around 1800 hours and immediately encountered a complex obstacle system covered by heavy automatic weapons and mortars. Rather than fighting through the ambush, commanders decided to break contact and return to the airport for

additional forces and armored vehicles from other UN forces. No aerial reconnaissance was available except for aircraft which were covering Ranger forces in the market area of Mogadishu.⁵²

Upon returning to the airport, the entire QRF began preparations for a deliberate attack to relieve the Rangers. No aerial or ground reconnaissance effort was made to regain contact with the enemy, identify obstacles and routes, or develop the situation after contact was lost. Instead the force moved out with Pakistani armor and Malaysian BRDM armored personnel carriers (APCs) and was promptly attacked while encountering barricades constructed to block streets. The QRF attacked through a series of obstacles, block by block until they reached the Rangers several hours later. Having no force available to keep a route clear or accurately develop the situation, the force again ran a gauntlet of fire to the city stadium where wounded personnel were evacuated by helicopter. The column then returned around day-break to the airport.⁵³

Poor tactical reconnaissance contributed to the failure of the rescue mission. Additional armored forces, including an armored task force sent in after the incident, could have helped the QRF.⁵⁴ Besides protection and firepower, the force would have had the ability to breach obstacles quickly. Further, armored forces may have been able to conduct daily reconnaissance and force presence missions, and to move swiftly to

develop the situation while under fire. Under the force structure available; however, several other actions would have at least improved the situation.

American forces failed to focus on a reconnaissance objective. The QRF did not gain and maintain contact while failing to maintain freedom of maneuver.⁵⁵ In this case, continuous route and area reconnaissance could have maintained open routes or at least alerted the forces to the potential ambushes and sought out alternate routes. Further, commanders should always push reconnaissance forward. It is easier to gain and maintain contact than to abdicate the initiative and risk surprise.

Aggressive and frequent route reconnaissance by the QRF from the airport through the city while not being provocative, could have developed a view of the area, the enemy, and potential ambush sites. Further, their presence while dangerous, would have assisted in keeping at least some routes clear. Once the mission began, a maximum reconnaissance effort should have been committed to assist the QRF. Success of the mission hinged on relieving the Ranger units which meant the QRF was the main effort. Aerial and ground scouts from the QRF at the airport should have moved quickly to establish routes, identify obstacles, and maintain contact with the enemy. Further, the force should have been notified in advance so that reconnaissance preparation and planning could have taken place thereby assisting the QRF when it was called upon.

A critical component of all these options was the need for armor protection. The task force commander had requested an increase in forces due to the deteriorating situation.⁵⁶ The light force was not equipped to go into that type of MOUT operations without additional support. A light, dismounted scout platoon would be of little use in this regard. Given the task organization, some type of prior training, liaison, and planning should have occurred with the UN forces. Maximizing reconnaissance includes all available forces. Prior coordination, even of a general nature, would have alleviated some of the confusion during the movement of the reaction force. Discussions about U.S. reconnaissance doctrine, procedures, SOPs, and signals could have been worked out. Further, these forces would have provided an additional capability for the QRF to push forward, conduct route reconnaissance, and identify obstacles. While developing the situation, the QRF would have gained additional information, reaction time through depth, force protection, and flexibility.

Subsequent to the events on 3-4 October 1993, the following actions were taken, which had they occurred prior to the raid on General Aideed, may have assisted the tactical reconnaissance efforts of the QRF and UN forces. Three clear objectives were directed by President Clinton: keeping major roads open (route reconnaissance), force protection, and security operations.⁵⁷ Reinforcements including heavy armor have been sent to Mogadishu. Helicopters make daily patrols along with UAVs which send

back video of the city (aerial reconnaissance). Further, armored forces provide a significant capability to maintain a continuous presence along major routes in the city beyond that of the previous forces.⁵⁸ The impact of these actions has already been felt. Now according to the Joint Task Force Commander for Somalia, "Freedom of movement along the major supply routes is pretty good."⁵⁹

Peace operations such as occurred in Beirut and Somalia are much different than the Clausewitzian ideal of making the enemy do one's will. Sun Tzu contended that the art of winning at war was knowing one's enemy and that victory without fighting was a significant skill.⁶⁰ This idea becomes critical during peacekeeping operations when force can only be used in self-defense, or as a last resort to protect oneself or other peacekeepers.⁶¹ Ultimately, well-disciplined, trained, professional units proficient in tactical combat skills, can adjust to the rigors of tactical reconnaissance during peacekeeping operations if the mission and ROE are clear.⁶² The application of force may be restrained, but the capability must exist, as a deterrent, to apply overwhelming force if necessary.

Tactical reconnaissance provides the necessary information to develop intelligence and the tactical situation along with providing early warning to peacekeeping forces. To collect the necessary information on belligerent forces, a comprehensive reconnaissance and surveillance plan must be developed. The commander must understand that, tactical actions

may have political consequences, but his reconnaissance effort must **still** obtain critical information. The commander must continually evaluate the situation and focus the reconnaissance effort on those critical information requirements which support his intent for the operation. Further, all information obtained must be reported for proper analysis, providing the foundation for decisive action and conflict termination. Successful peace operations have balanced these requirements while focusing the reconnaissance effort on critical objectives.

Tactical reconnaissance contributed to tactical success during the Dominican Republic peacemaking operation of 1965-66, Operation **Power Pack**. The primary influence for intervention came from representatives in the U.S. embassy in Santo Domingo. Their lack of accurate and relevant information concerning the true nature of the problem in the Dominican Republic caused some initial tactical and reconnaissance difficulties. Once units arrived they knew very little about the tactical situation due to a lack of accurate information. Information that was available often was unsubstantiated, biased, or irrelevant to the on-going operation.⁶³

As the operation continued, reconnaissance improved. Army and Marine forces maintained contact with rebel forces while insuring freedom of action by aggressive patrolling. Unfortunately, this type of reconnaissance received low priority until the operation progressed to the point that a comprehensive reconnaissance and surveillance plan (R & S

plan) was in place. The R & S plan became especially important given the city/urban conditions under which the operation proceeded.

Information requirements for tactical reconnaissance included: political and military, cultural, social, geographic, logistical, and legal information.⁶⁴ Most reconnaissance efforts focused on house to house searches, route/area reconnaissance to secure the International Security Zone (ISZ), and aerial reconnaissance by A Troop, 17th Cavalry. The cavalry provided redundancy to ground operations and reconnaissance to identify enemy locations, key terrain, and critical facilities. Key terrain became critical buildings or bridges such as the Duarte bridge within the ISZ.⁶⁵ The ISZ provided buffer between the rebels and loyalist forces.

Checkpoints controlled movement through the ISZ and cut off the movement of rebels and supplies to staging areas in the countryside. Further, Special Forces personnel conducted reconnaissance and surveillance of the countryside to determine the extent of rebel activity, gather information on popular feelings, and look for signs of Cuban involvement. They conducted these operations under the cover of economic, agricultural, or medical surveys.⁶⁶

These were not the only innovative reconnaissance techniques. Special forces units acquired a plan for the Santo Domingo sewer system which allowed reconnoitring of the sewer by engineers who then emplaced obstacles. After the obstacles were installed, surveillance was initiated in

twenty minute shifts over manhole covers. Infiltration from the underground fell sharply.⁶⁷ In the end, flexibility and disciplined action were critical in the accomplishment of the myriad of reconnaissance tasks required of the paratroopers and Marines during Operation **Power Pack**.

Operation **Provide Comfort** provides the most recent example of tactical reconnaissance providing a foundation the success of a peace operation. Forces conducted tactical reconnaissance in support of peace making, peacekeeping, and limited combat operations.⁶⁸ National intelligence collection systems were not well-suited to gathering the types of information required during the operation. Tactical reconnaissance and surveillance focused on political, cultural, and social/humanitarian information requirements. A significant emphasis was placed on physical collection by ground and aerial reconnaissance forces. The Combined Task Force (CTF) projected a maximum reconnaissance effort forward over a broad area. Reconnaissance was conducted to identify refugee areas, assess current conditions, and to identify and control helicopter landing zones.⁶⁹

During Operation **Provide Comfort**, the CTF commander's priority information requirements (PIR) differed significantly from combat tactical reconnaissance focused solely on enemy activity. Reconnaissance missions followed the fundamentals of gaining and maintaining contact, retaining freedom of maneuver, and developing the situation rapidly.

Information collection and tactical reconnaissance focused not only on Iraqi troop dispositions, but information on the infrastructure and living conditions. Early information requirements included monitoring chokepoints for Iraqi movement, size, status and location of refugees as well as route and zone reconnaissance to secure the UN mandated zone. Ground and air units, news video, Kurdish interpreters, and aid organizations provided most of the necessary information.⁷⁰

Units moved into refugee areas to assess conditions, assist in the delivery of aid shipments, evaluate sanitary and health conditions. In reconnaissance terms, route and area reconnaissance were the primary missions. Tactical reconnaissance and information assessment provided critical information for the operational commander, General Galvin SACEUR, as part of a comprehensive surveillance plan.⁷¹

Further, it became necessary to coordinate information collection with allies and non-governmental agencies. This closely resembled normal task organization of reconnaissance assets in military units. In fact aid agencies combined with contingents from eight countries to form a force equivalent in size to a division.⁷² Despite an initial lack of focus on the reconnaissance objective or unity of effort, the operation successfully developed information concerning social, cultural, humanitarian, and security conditions in northern Iraq.

One reconnaissance fundamental initially overlooked was the reporting of all information quickly and accurately.⁷³ Early in the operation more accurate information and assessment was required concerning weather, security and threat conditions, medical and logistic requirements. This lack of timely collection and dissemination caused initial relief actions to be disjointed and reactions to events to be uncoordinated. The primary cause for this was a lack of expertise--medical and logistics personnel. These units can collect information in such situations as well as or better than combat forces.⁷⁴

In addition to the focus on humanitarian related objectives, reconnaissance also oriented on the social and cultural organization of the Kurdish people, the Iraqi army in northern Iraq, and historical information concerning the Kurdish-Iraqi conflict. This information was deemed critical to CTF decision making.⁷⁵ Further, this information assisted in easing the suffering of the Kurdish people and allowed the CTF to formulate plans on relocation of the refugees.

Tactical reconnaissance operations were also conducted in southern Iraq along the demarcation line (DML) by the 1st Infantry Division (MECH) 2nd ACR, and 3rd (US) Armored Division. Checkpoints were operated at Safwan, An Nasiriyah, and As Samawah to control refugees, surveillance focused on identifying Iraqi security agents, and area reconnaissance was conducted to assess humanitarian needs. Counterintelligence teams

worked to identify pro-Saddam groups and to collect information concerning possible war crimes. All assets were used to unify information collection and security. The divisional cavalry squadrons, organized as combined arms teams with ground, aviation, and combat support assets worked especially well.⁷⁶

Operation **Provide Comfort** provides emphasis for several important points. Tactical reconnaissance is a critical component of peace operations. Reconnaissance must stay focused on reconnaissance fundamentals. Adjustments to the task organization based on the situation provide the necessary assets for information collection, contributing to the overall success of the operation. Further the operation proved that well-trained, professional military forces, even in a combined environment, can conduct diverse peace operations in addition to combat.

Units must stay prepared for combat. Coalition forces conducted combat operations against Iraqi forces and then quickly transitioned into peace operations. In northern Iraq it seemed it was better to bring all one's equipment and not use it, than to have left heavy weapons and then need them.⁷⁷

Operations **Power Pack** and **Provide Comfort** illustrated the necessity of maintaining the flow of information while looking at different information sources. Information collection addressed both military and social factors, reconnaissance, patrolling, command and control, and EOD.

Tactical reconnaissance can have political, cultural, and social information as the objective.

Army forces can not train for every possible contingency. Our Special Operations Forces (SOF), though not normally utilized in the tactical reconnaissance role, are an example of forces which can have a combat and non-combat function in peace, conflict, or war. During Operation **PROVIDE COMFORT** their versatile training in cultural and military awareness, special skills, and language proficiency provided an effective resource for tactical reconnaissance in the contentious environment of northern Iraqi. SOF soldiers likened their activities to prior missions only conducted without guns.⁷⁸

Current reconnaissance training provides the foundation for proper tactical reconnaissance contributing to successful peace operations. Training places emphasis on the fundamentals of reconnaissance. Peace operations do not require an abrupt shift in our training or training methodology. Current combat skills account for 85% of the skills required for peacekeeping. Once an operational area is identified, additional, deployment specific training can be conducted.⁷⁹

The Army's approach seems particularly accurate after examining the UN handbook on peace operations training. Military information is obtained by patrolling, aerial reconnaissance, check points, and observation posts. The training required by the UN contains primarily scout and tactical

reconnaissance skills including: operation of check points and OPs, patrolling, map reading, weapons and equipment training, environmental survival, and first aid.⁸⁰ Additional culture/language/habits, and civil disturbance training along with specific training focused on the area of operation can be conducted prior to deployment. An approach such as this will not hurt readiness.

Patience is an attribute for any good scout. He must be able to determine what is valuable information while using observation and stealth to effectively obtain it.⁸¹ These attributes certainly are important for peace operations. Major George Steuber contends there is no conflict between training for war and peacekeeping, in fact training for war is essential for operations as part of a peacekeeping operation. Steuber based this assessment on his personal experience with the UN mission in Cambodia (UNAMC), which had few maps and an insufficient intelligence and reconnaissance capability.⁸²

Peacekeeping requires the same types of leaders and soldiers as any operation: firm, fair, and competent professionals.⁸³ Every scout and every soldier makes a difference in conducting reconnaissance. Reconnaissance assets must never be in reserve. All assets necessary to achieve the commander's information requirements must be utilized. Outposts and patrols collect information and provide security for peace operations.⁸⁴ Those assets used for reconnaissance must be agile,

proficient, and dedicated to the reconnaissance process. Sensors are useful and can provide valuable information, but scouts or patrols provide redundancy, flexibility, and a physical presence, all integral parts of peace operations.

Some believe however, that U.S. forces are not desirable for general peacekeeping operations since these operations require special training. However, Secretary Aspin now contends that unit mission essential task lists (METL) should be changed to include peacekeeping tasks.⁸⁵ These are understandable contentions given our high-tech weapon systems, soldiers highly trained for intense combat at the CTCs (NTC, CMTC, and JRTC), and a doctrine which supports aggressive military action, including continuous, aggressive reconnaissance and surveillance. Further, the Marine experience in Lebanon during 1982-83 suggested additional training was required prior to deployment on a peace operation.

Tactical reconnaissance training and preparation, by conventional forces along with special operations units maybe most appropriate for peace operations. We must consider that current budget projections will not support specially designed forces for peace operations. Operations **Power Pack** and **Provide Comfort** suggest that current forces, well-trained in tactical skills are appropriate for peace operations, if they follow the fundamentals and take a versatile, broad minded approach to operations.⁸⁶

III. CONCLUSIONS AND IMPLICATIONS

"The aim of all reconnaissance is the acquisition of information"⁸⁷
Brigadier David Henderson

From Sun Tzu through modern times, reconnaissance and surveillance has had a critical impact on the battlefield. Taken in this historical context, tactical reconnaissance during peace operations has been no exception. During peace operations, units must be trained and proficient in basic warfighting skills. Tactical reconnaissance will not be an easy; operations will not be static but dynamic. Political considerations in the form of the ROE, missions assigned, and mandate for operations must be clear and will influence the execution of reconnaissance tasks. Success will depend on reconnaissance and surveillance conducted according to the fundamentals of reconnaissance. This analysis has shown that deviation from those fundamentals can lead to military misfortune. For some UN authorized operations, techniques such as using stealth or covert patrolling may not be acceptable. The fundamentals remain applicable in every situation; only the execution and focus change. "Seeing the battlefield" through the fog of uncertainty which surrounds peace operations will remain critical for the commander.

However, the Army must break the paradigm of fighting for information which has existed for almost 50 years. The focus on combat with a Soviet style enemy should be replaced with an emphasis upon contingency operations across the spectrum of conflict. Currently, our

organizations designed for reconnaissance are manned and equipped to fight for information. We must look at technology to support our new doctrine for peace operations including UAVs, sensors, and improved GSR. This emphasis away from fighting and toward information collection returns reconnaissance to its more traditional form. Reconnaissance doctrine should emphasize technology to improve information gathering, leading to a savings in manpower, which in turn could be used to improve tactical organizations. An example of a greater use of technology or improved unit structure would be a brigade reconnaissance organization.

The Army must be prepared to conduct tactical reconnaissance during peace operations, in both a joint and combined environment. Force structure and budget requirements will not support separate peacekeeping or peace enforcement formations. Trained, disciplined officers and soldiers, focused on the fundamentals, can accomplish the mission. Current training accounts for 85% of the tasks required for peacekeeping operations. Our smaller post-1994 army will have to remain as disciplined and even better trained than the Cold War army. The Army does not need nor can it afford to have units dedicating valuable training time to peace operations. Once a unit receives notification to deploy for a peace operations, any additional, deployment specific training can occur.

Tough training, builds disciplined, proficient units which can execute any mission on the METL. Proficient units can use this fundamental training

as a foundation to conduct peace operations which require flexibility and discipline. Efficient units can then adapt and change to the varying situations found in peace operations. Leaders must learn to be mentally agile, creative and broad minded while maintaining an impartial position. The commander's challenge remains: to collect and analyze information so that he can focus combat power to accomplish the mission while providing for his own security.

Reconnaissance and surveillance must be coordinated through a comprehensive collection plan. With finite assets, the effort must be focused on critical information requirements. Physical reconnaissance confirms information about belligerent intentions. The synchronization of all available reconnaissance and surveillance assets will have a synergistic effect on information collection further contributing to force protection.

Information attainment is paramount during any type of operation, but especially peace operations. Doctrine has expanded the mission profile, but the principles and tasks remain the same. Our current reconnaissance doctrine is basically sound. It properly emphasizes tactical reconnaissance fundamentals which are applicable across the tactical continuum from peacekeeping, peace making, peace enforcement, and combat operations. Failure during some peace operations resulted when the fundamentals were violated. Doctrine must continue to stress the application of the reconnaissance fundamentals. The techniques and procedures employed

in peace operations change for reconnaissance units. Aggressive collection of information will rarely meet the ROE. Overt, non-aggressive means must be employed to achieve the reconnaissance objective.

Gaining and maintaining contact may encompass patrolling the streets and the countryside, maintaining contact with the people. Reporting of information and orientation of the objective may include social, environmental, health and humanitarian, and cultural information.

Multi-functionable technology integrated within tactical organizations at the Battalion/Task Force and Brigade/Division level may enhance the commander's ability to receive and analyze reconnaissance information. Fielding of the UAV, OH-58D, RAH-66 Scout Helicopter, and Future Scout Vehicle (FSV) will improve reconnaissance and surveillance at division level and below. These technological advances in sensor platforms improve our information collection capability. Increasing commonality of systems and increased application of technology, which performs with greater efficiency when used by disciplined, trained soldiers will further enhance reconnaissance during peace operations.

Cavalry units appear ideally suited for peace operations since they are a combined arms force, suited for decentralized, reconnaissance operations, with the necessary command and control to function. Additional task organization would require infantry, linguists, psyops, military police, medical, and civil-military affairs personnel. Air-ground reconnaissance

operations are a necessity during peace operations. These operations provide redundancy, depth, flexibility, and a significantly greater capability.

Cavalry units utilizing flexible technology to obtain information and overwhelming combat forces available to deter attempts at breaching the peace would reduce the risk to reconnaissance personnel during peace operations. Armoring up provides protection and deterrence.

Technology will have a significant impact upon the techniques used to execute reconnaissance tasks. National technical means provide good results, but in a peacekeeping environment limitations exist. There must be a balance between target surveillance and risk. The target must be critical enough to warrant close in observation and surveillance. In turn, people who operate the systems and the scouts on the ground will be affected by these improvements in technology. Ultimately the focus must be on training combat reconnaissance skills required to win our nation's wars. That after all is the primary purpose of the Army. Military forces must still be devoted to mid- to high- intensity conflict which are the most difficult missions.

The Army must keep the right balance between people, technology, and doctrine. All forces can play a role in reconnaissance, especially with the variety of information requirements including: cultural, political, social, humanitarian, and infrastructure objectives. Military police, medical, engineers, linguists, civil affairs, and special forces to name a few all have a contribution to tactical reconnaissance in peace operations.

A careful review of the findings and implications supports the assertion that tactical reconnaissance doctrine based upon six principle fundamentals is sound and applicable to peace operations. Political restrictions will always exist; the commander must use innovative techniques to still accomplish his assigned mission. The usefulness of this study may not be the conclusions drawn from the historical examples cited. Rather, they serve as a guide for the tactical commander as he is called upon to conduct peace operations. Budget and manpower constraints will not allow narrow tactical focus. Versatility and flexibility will be necessities in tactical reconnaissance operations. Clearly, the U.S. cannot try to conduct every peace operation; however, we can train soldiers and leaders to "think out side the box". Every situation may have a myriad of responses. Success will come from flexible use of our doctrine based on a particular situation. The information the commander will require must be obtained in a timely and accurate manner. Tactical reconnaissance operations based upon the key fundamentals of reconnaissance will provide the information contributing to that success. As ever, commanders can never require too much reconnaissance.

Appendix A. Definitions

Intelligence: the product resulting from the collection, evaluation, analysis, integration, and interpretation of all available information which concerns one or more aspects of foreign nations or of areas of operations and which is immediately or potentially significant to military planning and operations.⁸⁸

Peace operations: operations including peacekeeping, peace making, peace building, peace enforcement.

Reconnaissance: a mission undertaken to obtain information by visual observation, or other detection methods, about the activities and resources of an enemy, or about the meteorologic, hydrographic, or geographic characteristics of a particular area. Reconnaissance produces combat information through a focused collection effort and is a by-product of all combat operations.⁸⁹

a.Fundamentals.⁹⁰

1.Maximum reconnaissance force forward. In reconnaissance every scout makes a difference. Cavalry often conducts reconnaissance over extended frontages and requires the maximum number of scouts forward to perform the mission. Cavalry units normally do not keep scouts, either ground or air, in reserve. Dispositions are not linear, depth is essential especially in restrictive terrain. Depth is achieved by using integrated air-ground teams.

2.Orient on the location or movement of the reconnaissance objective. The commander focuses the efforts of the unit with a reconnaissance objective. This objective may be identified by the IPB. It may include terrain, enemy, or a control feature. Commanders stay focused on reaching the reconnaissance objective regardless of what is encountered during the mission. Capabilities and limitations of the unit are a significant factor influencing how aggressively the commander attempts to reach the objective.

3.Report all information rapidly and accurately. Reconnaissance is conducted to gather information. Commanders need this information to confirm or make decisions. Information may lose its value quickly. Seemingly unimportant information may be extremely important in context with other information. Negative reports may tell more than positive reports or no report at all. Commander and IPB process can help identify critical information required. Communications must be adequate to allow uninterrupted flow of information.

4.Retain freedom of maneuver. Anticipation and mental agility allows leaders to dictate events, not merely to react to enemy action. Units must maintain the ability to maneuver on the battlefield in order to continue the reconnaissance mission. Decisive engagement occurs when a unit cannot maneuver to extricate itself and is fully committed. Proper movement techniques, proper reconnaissance techniques, and mission

focus prevent decisive engagement. IPB provides information used by leaders to anticipate locations of likely contact.

5.Gain and maintain enemy contact. Information on the enemy is always critical. The enemy is seldom static and changing situations must be reported to the commander. Contact is any condition ranging from surveillance sighting to engaging in close contact. Once gained, contact is not lost unless ordered. Responsibility for maintaining contact does not rest solely with the scout or small unit first gaining it. Commanders are responsible for maintaining contact using all the resources available to them.

6.Develop the situation rapidly. During reconnaissance, tactical situations require action to determine what is being faced. Situations may be terrain oriented, obstacles, or enemy. Terrain or obstacles require close reconnaissance, bypass, hasty breach if necessary and marking. If an enemy force is encountered, reconnaissance must determine his size, composition, dispositions, and activities. Reconnaissance techniques in the form of drills, are used while developing the situation.

b.Critical Tasks by Mission⁹¹

1.Route: reconnoitre and determine trafficability of route; reconnoitre all terrain the enemy can use to dominate route; reconnoitre all built up areas along route, all lateral routes, bridges, fords/crossings near

bridges; inspect and evaluate all overpasses, underpasses, and culverts; reconnoitre all defiles along route, clear all enemy from defiles and obstacles within capability; locate and clear the route of mines, obstacles and barriers; locate a bypass around built up areas, obstacles; find and report all enemy that can influence movement along the route; report all route information.

2.Area: reconnoitre all terrain within area including built up areas, bridges, fords and crossing sites near bridges; inspect and evaluate overpasses, culverts, and underpasses; locate and clear all mines, obstacles, and barriers within capability; find and report all enemy in area; report reconnaissance information; locate bypass around built up areas and obstacles.

3.Zone: reconnoitre all terrain within zone including built up areas, bridges, fords and crossing sites near bridges; inspect and evaluate overpasses, culverts, and underpasses; locate and clear all mines, obstacles, and barriers within capability; find and report all enemy in zone; report reconnaissance information.

c. Fundamentals and Peace Operations.

The following chart outlines the fundamentals of reconnaissance and four peace operations which the U.S. has conducted. Two operations encountered difficulty, while two were quite successful.

RECONNAISSANCE FUNDAMENTALS AND PEACE OPERATIONS

FUNDAMENTALS/OPERATIONS	DOM REP (1965-66)	BEIRUT (1983)	SOMALIA (OCT 1993)	IRAQ (MAR-JUN 1991)
MAXIMUM RECON FORWARD	+	-	-	+
ORIENT ON RECON OBJECTIVE	+	CONVENTIONAL FORCES ONLY	-	+
REPORT ALL INFORMATION RAPIDLY AND ACCURATELY	+	-	-	+
RETAIN FREEDOM OF MANEUVER	+	-	-	+
GAIN & MAINTAIN CONTACT	+	-	-	+
DEVELOP SITUATION RAPIDLY	+	0	-	+

+ Accomplish, 0-No affect, - Failed

ENDNOTES

1. General George S. Patton, War As I Knew It, (Boston: Houghton Mifflin Co., 1947), 310.
2. Nancy B. Dyke and David Wurmser, The Professionalization of Peacekeeping: A Study Group Report (Washington: United Nations Institute of Peace, 1993), these ideas were paraphrased from the introduction. One need only look at the problems in these areas and see how combat and non-combat, peace making and peacekeeping are blurred. The question also arises concerning the utility of peacekeeping in internal conflict or civil war.
3. Sean D. Naylor, "'New Inventions' Sought For New Missions", Army Times, November 1, 1993, 3.
4. This discussion was paraphrased from the introduction in Jennifer Morrison Taw and Robert C. Leicht, The New World Order and Army Doctrine: The Doctrinal Renaissance of Operations Short of War? (Santa Monica, CA: The RAND Corporation, 1992), ix.
5. The fundamentals are defined at Appendix A. They are derived from FM 17-95, Cavalry Operations, (Washington, DC: Department of the Army, 1991).
6. U.S. Army, FM 17-95 Cavalry Operations, (Washington: Department of the Army, 1991), 3-3. The evaluation of the four historical examples, Operations **POWER PACK** (Dominican Republic), Lebanon 1983, **PROVIDE COMFORT** (Iraq), and **RESTORE HOPE** (Somalia) are listed in the table at Appendix A. The table illustrates operations which encountered difficulty. All failed to conduct tactical reconnaissance by the fundamentals. This paper provides specific details and analysis on each operation in Section II.
7. David Henderson, The Art of Reconnaissance, (London: John Murray, 1914) paraphrased from pages 1-9 and synthesized from research on OOTW.
8. FM 17-95, 3-2.
9. FM 17-95, 3-2.
10. FM 17-95, 3-1.
11. FM 17-95, 3-2.

12. Discussion of UN operations in The Blue Helmets: A Review of UN Peace-Keeping (New York: United Nations, 1990) and the U.S intervention in the Dominican Republic, 1965 in Lawrence A. Yates' Power Pack: U.S. Intervention in The Dominican Republic, 1965-66, (Fort Leavenworth: Combat Studies Institute, 1988).
13. U.S. Army, FM 17-98, Scout Platoon (Washington: Department of the Army, 1987), 3-32.
14. FM 17-98, 3-39.
15. FM 17-98, 3-44.
16. U.S. Army, FM 17-97 Regimental Armored Cavalry Troop, (Washington: Department of the Army, 1988), 3-3.
17. Derived from Joint Chiefs of Staff, Joint Pub 3-07.3, (Revised Final Draft), Joint Tactics, Techniques, and Procedures (JTTP) For Peacekeeping Operations, (Washington, DC: Government Printing Office, 1992) GL-II and U.S. Army, FM 100-5, Operations, (Washington, DC: Department of the Army, 1993), GL-7.
18. International Peace Academy, Peace Keeper's Handbook, (New York: United Nations, 1978), IV-8.
19. Peace Keeper's Handbook, IV-13.
20. CLIC PAPERS, "Operational Considerations For Military Involvement In Low Intensity Conflict", (Langley, Air Force Base, VA: Army-Air Force Center for Low Intensity Conflict, 1987), 5.
21. Sun Tzu, The Art of War edited by Samuel B. Griffith (London: Oxford University Press, 1963), 77.
22. Sun Tzu in The Art of War, addresses critical information requirements concerning the enemy on pages 98, 100, and 104-105. He also addresses elements of a nations infrastructure key to peace operations on page 106: "roads and paths, cities and towns, extent of damage, infrastructure, fertility of fields, barrenness, opposition". Clausewitz in On War page 141, addresses information to the commander being critical for clarity and decision making on the battlefield. Also on page 348 he discusses infrastructure and farming conditions. Important though for different reasons in his time, for peace operations it is still relevant. Finally, Jomini emphasizes the impact of terrain (page 405, Art of War) Further, Jomini asserts that the commander should neglect "no means of gaining information".

23. Carl von Clausewitz, On War. Edited and translated by Michael Howard and Peter Paret, (Princeton, NJ: Princeton University Press, 1984), 117-118. The discussion focuses on determining information of "every sort about the enemy and his country" quite applicable to peace operations.

24. FM 100-5, 2-6.

25. Reconnaissance operations failed to provide accurate information to the commander alerting him to the pending attack. If the information had been available, COL Geraghty could have increased security, surveillance, and reaction force readiness. Instead Marine security forces had unloaded weapons at the security posts where the van penetrated the compound. Benis Frank U.S. Marines In Lebanon, 1982-1984, covers this in Chapters 6 and 7 on page 108.

26. Taken from an interview with Major Kevin McCarthy, USMC who served in Beirut as the MAU S-2 and Benis M. Frank's Marines In Lebanon, 1982-1984, (Washington, DC: Headquarters, U.S. Marine Corps, 1987). McCarthy has just finished a thesis on the Marine mission and Frank's book is a very detailed account of the entire Marine operation from September 1982 until February 1984.

27. Michael D. Barbero, Peacemaking: The Brother of Peacekeeping or a Combat Operation?, (Fort Leavenworth, KS: School of Advanced Military Studies, U.S. Army Command and General Staff College, 1988), 20.

28. Frank, 63.

29. Ibid, 63.

30. The Long Commission which investigated the October 1983 bombing concluded, "the mission statement, the original ROE, and implementation in May 1983 of dual ROE", contributed to an environment which precluded an adequate response to a terrorist attack. Benis Frank, U.S. Marines In Lebanon, 1982-1984, covers these points on page 64, 172-173.

31. Phillip L. Brinkley, Tactical Requirements For Peacekeeping Operations, (Fort Leavenworth, KS: School for Advanced Military Studies, U.S. Army Command and General Staff College, 1985), 28. Barbero also discusses the security problems on page 20. See also Friedman's Beirut to Jerusalem.

32. Barbero, 23.

33. Major McCarthy asserted that three battalions would have been required to secure the airport properly. Further, for political considerations, the airport could not be shut down so access had to be allowed. The airport was a visible symbol of the Lebanese government's legitimacy. Frank also covers this in Chapters 5 and 6.

34. Major McCarthy indicated that after the PLO pulled out only women and children were left behind. After the Marines became perceived as a partisan force, the population no longer had a vested interest in helping the Marines. At that point young men, some armed, began to be seen in the area. They were elements of the terror organization which would ultimately conduct the bombing raid in October 1983. Benis Frank also has a good discussion of this on pages 56-57.

35. Frank, 56-57.

36. Frank, 56.

37. Major McCarthy, and Benis Frank in his book page 81, indicate movement was severely restricted and by September 1983, patrolling had been stopped by EUCOM. Every patrol or reconnaissance operation was cleared directly or indirectly through the embassy in Beirut. If the Marines conducted unauthorized operations, Washington (Department of State) was informed. The MAU commander then received questions from Washington to ascertain what was happening.

38. Frank, 56.

39. Brinkley, 23.

40. Brinkley, Barbero, and Frank all point out the activities going on around the Marine compound. Frank covers the details of the changing mission and the escalation of fighting during the summer, pages 81-94. The Long Commission Report also discussed the problems with the mission and lack of security on the perimeter. Frank lists the Commission findings on pages 172-173.

41. Information obtained from Major McCarthy. Many of the missions and reconnaissance and surveillance information collected during the period is still classified. Major McCarthy's thesis and Frank's book provide significant insight into most of the security operations. Both sources assert there were shortcomings in the intelligence picture caused by a lack of hard information gained through reconnaissance.

42. Ultimately, information and indicators from national sources were not passed to the MAU. No human intelligence (HUMINT) or "inside" information was developed concerning the terrorist group responsible for the attack. Indications of the type of threat existed since the airport attack turned out to be almost identical to the Green Beach bombing in November 1982 and the embassy bombing in April 1983. The paucity of accurate information and intelligence limited COL Geraghty's ability to clearly understand and effectively deal with the threat he faced. Benis Frank provides a good discussion of this in U.S. Marines In Lebanon, 1982-1984.

43. Brinkley, 21.

44. Major McCarthy interview and Benis Frank in U.S. Marines In Lebanon, 1982-1984. Again much of the Marines' reconnaissance and surveillance effort is still classified. McCarthy admitted that two CI agents were out the night of the bombing trying to make contact with the Druze militia. Attempts were being made to fill in the gaps but without command emphasis, not much could be done.

45. Patrolling restricted by EUCOM order and the requirement to have Department of State or embassy approval for extended patrols. McCarthy provided his view on this and Frank address this on page 81. Further, both assert that safety and mission constraints were a concern. The result was that the Marines took over security of the airport even though they were not resourced to do so. The LAF was supposed to keep the airport open and provide overall security. Frank has a superb discussion of this in U.S. Marines In Lebanon, 1982-1984.

46. Frank, 56-82.

47. The Beirut experience also presents several relevant conclusions. Had the Marines remained impartial or had the ROE authorized shooting intruders on sight, the incident may not have been as catastrophic. However, under the circumstances only proper reconnaissance could have helped avert the disaster and that is a command responsibility. Also, FM 100-5, page 29 discusses political constraints. The critical component is good reconnaissance which provides the commander information enhancing force security regardless of political constraints.

48. US Army, Revised Final Draft, Operation RESTORE HOPE Lessons Learned Report, (Fort Leavenworth, KS: Center for Army Lessons Learned, 1993), 1.

49. Ibid, 3-19.

50. Ibid, 6.
51. Determined from open sources, CNN news broadcasts and the briefing to SAMS by COL McDonough, Director of SAMS after the ambush on 18 October 1993 during which a timeline and other information was available. Further supported by articles by Naylor, Army Times, November 1, 1993.
52. Tom Donnelly and Katherine McIntire, "Rangers In Somalia: Anatomy of a firefight", Army Times, November 15, 1993, 14.
53. Dennis Steele, "Mogadishu, Somalia: The Price Paid", Army, November 1993, 25-26.
54. Much of these information as been derived from open sources, news accounts, newspaper articles, and a briefing given by the Director of SAMS after the incident on 18 October 1993.
55. Information derived from a variety of open sources: CNN, various newspaper accounts, SAMS informational briefings and Army Times articles by Sean Naylor.
56. Developed from several news sources including CNN, Army Times, and The Kansas City Star.
57. "U.N. Anxious in Quiet City", The Kansas City Star November 7, 1993, A-18.
58. Associated Press, The Kansas City Star, November 7, 1993, A-18.
59. Katherine McIntire, "Somalia task force primed to protect U.S. troops", Army Times, November 8, 1993, 8.
60. Sun Tzu, 77.
61. Taken from Barbero, Peacemaking: The Brother of Peacekeeping or a Combat Operation? conclusions, 35-40.
62. Karl W. Eikenberry, "The Challenges of Peacekeeping", Army, September 1993, 19.
63. Lawrence A. Yates, POWER PACK: U.S. Intervention In The Dominican Republic, 1965-66, (Fort Leavenworth, KS: Combat Studies Institute, 1988), 176.
64. Ibid, 102.

65. Ibid, 106.
66. Ibid, 108.
67. Ibid, 128.
68. John Kelly, Tactical Implications For Peacekeeping In Ethnic Conflict, (Fort Leavenworth, KS: School for Advanced Military Studies, U.S. Army Command and General Staff College, 1993), 13.
69. Hayward S. Florer, United States Army Special Forces: Versatile Element In The Future Security Environment, (Fort Leavenworth, KS: School of Advanced Military Studies, U.S. Army Command and General Staff College, 1993), 24.
70. Kelly, 37.
71. Hayward S. Florer, United States Army Special Forces: Versatile Element In The Future Security Environment, (Fort Leavenworth: School of Advanced Military Studies, 1993), taken from a discussion of SOF operations during Operation **PROVIDE COMFORT**, 23.
72. Florer, paraphrased from pages 22-24.
73. Derived from John Kelly's Tactical Implications For Peacekeeping In Ethnic Conflict and John P. Cavanaugh, Operation Provide Comfort: A Model For Future NATO Operations, (Fort Leavenworth, KS: School of Advanced Military Studies, U.S. Army Command and General Staff College, 1992). There was a problem initially with a lack of unity of effort among all the agencies/nations involved. This hindered the timely dissemination of critical information.
74. Kelly, 36.
75. Kelly, 36.
76. This information is taken from the authors own experience during Operation **DESERT STORM/PROVIDE COMFORT** and discussions with members of the 3rd (US) Armored Division and the 2nd ACR during operations in Southwest Asia. Also, Kelly has a good discussion of the implications for tactical units in his monograph Tactical Implications For Peacemaking in Ethnic Conflict.
77. Kelly, 13-15. Apparently British forces brought artillery along and it served to deter Iraqi security forces.

78. Jennifer Morrison Taw and Robert C. Leight, The New World Order and Army Doctrine: The Doctrinal Renaissance of Operations Short of War? (Santa Monica, CA: The RAND Corporation, 1992), 28.
79. This discussion is taken from Eikenberry and Naylor (Army Times, 15) and from Revised Final Draft, Operation RESTORE HOPE Lessons Learned Report, 12.
80. International Peace Academy, Peacekeeper's Handbook. (New York: United Nations, 1978), IV-13.
81. Henderson, 82.
82. Dr Jerold E. Brown, UN Peacekeeper in Cambodia, 1991-1992: An Interview With Major George Steuber, (Fort Leavenworth, KS: Combat Studies Institute, 1992), 9.
83. Brinkley, paraphrased from 30-34.
84. Henderson, 10.
85. Naylor, Army Times, November 1, 1993, 3
86. Dyke, 48.
87. Henderson, 154.
88. FM 34-10, Division Intelligence and Electronic Warfare Operations, (Washington, DC: Department of the Army, 1986), 1-1.
89. FM 17-95, Cavalry Operations, (Washington, DC: Department of the Army, 1991), Chapter 3.
90. The fundamentals listed here were taken from FM 17-95, 3-3 to 3-4.
91. Critical tasks were taken from, FM 17-95, 3-14, 3-19, 3-26.

SELECTED BIBLIOGRAPHY

I. Government Publications

Applying the National Training Center Experience: Tactical Reconnaissance. Martin Goldsmith with James Hodges, Santa Monica, CA: The RAND Corporation, 1987.

Dyke, Nancy B. and Wurmson, David. The Professionalization of Peacekeeping: A Study Group Report. Washington, DC: United States Institute of Peace, 1993.

CLIC PAPERS, "Operational Considerations For Military Involvement In Low Intensity Conflict". Langley Air Force Base, Virginia: Army-Air Force Center for Low Intensity Conflict, 1987.

Joint Publication 3-07 (TEST PUB). Doctrine For Joint Operations In Low Intensity Conflict. Washington, DC: Department of Defense, 1990.

Mao Tse-Tung. Selected Military Writings. Combat Studies Institute, "The Evolution of Military Thought", U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 1990.

UN Peacekeeper In Cambodia, 1991-1992: An Interview With Major George Steuber. Interview conducted by Dr. Jerold E. Brown. Fort Leavenworth, KS: Combat Studies Institute, 1992.

US Army. FM 7-98, Operations In A Low-Intensity Conflict. Washington, DC: Department of the Army, 1992.

US Army. FM 17-95, Cavalry Operations. Washington, DC: Department of the Army, 1991.

US Army. FM 34-10, Division Intelligence and Electronic Warfare Operations, Washington, DC: Department of the Army, 1986.

US Army. FM 71-1, Tank/Mechanized Infantry Company Team, Washington, DC: Department of the Army, 1988.

US Army. FM 71-2, Tank/Mechanized Infantry Battalion Task Force, Washington, DC: Department of the Army, 1988.

US Army. FM 71-3, Armored/Mechanized Infantry Brigade, Washington, DC: Department of the Army, 1988.

US Army. FM 71-100, Armored/Mechanized Infantry Division, Washington, DC: Department of the Army, 1988.

US Army. FM 71-100-1, Armored/Mechanized Infantry Division-TTP, Washington, DC: Department of the Army, 1988.

US Army. FM 71-100-2, Infantry Division Operations-TTP, Washington, DC: Department of the Army, 1988.

US Army. FM 100-5, Operations. Washington, DC: Department of the Army, 1993.

US Army. Revised Final Draft, Operation RESTORE HOPE Lessons Learned Report, Fort Leavenworth, KS: Center for Army Lessons Learned, 18 August 1993.

II. Books

Clausewitz, Carl von. On War. Edited and translated by Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press, 1984.

Collins, John M. America's Small Wars: Lessons for the Future. New York: Brassey's (US), Inc., 1991.

Crevel, Martin van. Command in War. Cambridge, MA: Harvard University Press, 1985.

Frank, Benis M. U.S. Marines In Lebanon 1982-1984. Washington, DC: Headquarters, U.S. Marine Corps, 1987.

Greenberg, Lawrence M. United States Army Unilateral and Coalition Operations In The 1965 Dominican Republic Intervention. Washington, DC: U.S. Army Center of Military History, 1987.

Henderson, David, BG. The Art of Reconnaissance. London: John Murray, 1914.

International Peace Academy. Peacekeeper's Handbook. New York: United Nations, 1978.

Jomini, Antoine Henri. Art of War. Edited by BG(RET) J.D. Hittle in Roots of Strategy. Harrisburg, PA: Stackpole Books, 1987.

Low Intensity Conflict: Old Threats in a New World. Edited by Edwin G. Corr and Stephen Sloan. Boulder, CO: Weterview Press, Inc., 1992.

Ministry of Defense, United Kingdom. The Army Field Manual: Volume 5 All Arms Tactics. Special Operations and Techniques. Part 1: Peacekeeping Operations. London: Ministry of Defense, 1988.

Ringlet, Jack K. and Shaw, Henry I. Jr. U.S Marine Corps Operations In The Dominican Republic April-June 1965. Washington, DC: Historical Division, Headquarters, U.S. Marine Corps, 1992.

Spiller, Roger J. Dr. "Not War But Like War": The American Intervention In Lebanon. Fort Leavenworth: Combat Studies Institute, 1981.

Sun Tzu. The Art of War. Edited by Samuel B. Griffith. London: Oxford University Press, 1963.

Taw, Jennifer Morrison and Robert C. Leicht. The New World Order and Army Doctrine: The Doctrinal Renaissance of Operations Short of War? Santa Monica, CA: The RAND Corporation, 1992.

The Blue Helmets: A Review of UN Peace-Keeping. New York: United Nations, 1990.

Yates, Lawrence A. POWER PACK: U.S. Intervention In The Dominican Republic, 1965-66. Fort Leavenworth: Combat Studies Institute, 1988.

III. Articles

Abzaid, John P. "Lessons For Peacekeepers". Military Review. March 1993, 11-19.

Associated Press. "UN anxious in quiet city". The Kansas City Star, November 7, 1993, A-18.

Donnelly, Tom and McIntire, Katherine. "Anatomy of a Firefight". Army Times, November 15, 1993, 14-18.

Eikenberry, Karl W. "The Challenges of Peacekeeping". Army, September 1993, 14-20.

Eshel, David. "Reconnaissance Operations." Defense Update Review 94 (March 1989), 10-18.

Evans, Ernest. "The U.S. Military and Peacekeeping Operations." World Affairs, 4 (Spring 1993), 143-147.

Hall, Wayne, M. "Principles of Reconnaissance." Military Intelligence, April-June 1989, 9-14.

Keen, Judy. "Aidid's fierce militia keeps U.N. guessing". USA Today, November 5, 1993, 7A.

Lewis, William H. and Sewall, John O.B. "United Nations Peacekeeping: Ends Versus Means". JFQ (Summer 1993): 48-57.

Matthews, William. "Soldiers deployed to Somalia veer from hero to enemy". Army Times, November 8, 1993, 28.

McIntire, Katherine. "Somalia task force primed to protect U.S. troops". ArmyTimes, November 8, 1993, 8.

Meacham, James. "From Peacekeeping to Peace Making". International Defense Review 25 (March 1992): 217-221.

Mitchell, Rodney B. "Reconnaissance Revisited." ARMOR, November-December 1981: 25-27.

MacGregor, Douglas A. "Cavalry Operations In Limited Warfare." Army Trainer, Spring 1993, 28-37.

Naylor, Sean D. "No Peace in Peacekeeping". Army Times, October 11, 1993, 14-16.

_____. "Will Soldiers Become Flabby Do-gooders'?" Army Times, October 11, 1993, 14-16.

_____. "Somalia: Rangers withdraw, new troops arrive". Army Times, November 1, 1993, 4.

_____. " 'New inventions' sought for new missions". Army Times, November 1, 1993, 3.

Reinstedt, Erick, A. "Light Cavalry in a Peacekeeping Role." ARMOR, May-June 1991: 33-37.

Steele, Dennis. "Mogadishu, Somalia: The Price Paid". Army, November 1993, 25-26.

IV. Unpublished Dissortation, Theses, and Papers

Baker, Alfred W. Peacekeeping: A New Role For U.S. Forces. U.S. Army War College, Carlisle Barracks, Pennsylvania, 1983.

Barbero, Michael D. Peacemaking: The Brother of Peacekeeping or a Combat Operation?. School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 1988.

Boeglen, Kenneth L. Does The Heavy Maneuver Brigade Commander Need An Organic Reconnaissance/Security Organization? Master of Military Art and Science Thesis, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 1992.

Brinkley, Phillip L. Tactical Requirements For Peacekeeping Operations. School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 1985.

Bryant, Albert. Blind Man's Bluff? A Look At The Tactical Reconnaissance Capabilities of the U.S. Army's Light Infantry Division. School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 1987.

Cavanaugh, John P. Operation Provide Comfort: A Model For Future NATO Operations. School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 1992.

Chappell, John Stephen. Security Operations: Current Net Value of NTC Lessons Learned For the Divisional Ground Maneuver Brigade. Master of Military Art and Science Thesis, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 1989.

Crow, Charles L. The J-Series Cavalry Squadron and Its Reconnaissance Mission. School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 1985.

Florer, Hayward S. United States Army Special Forces: Versatile Element In The Future Security Environment. School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 1993.

Kelley, John. Tactical Implications For Peacekeeping In Ethnic Conflict. School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 1993.

Kienle, Fredrick R. "Reconnaissance-Pull"-Seeking the Path of Least Resistance. School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 1990.

Kohler, Jeffery B. Peace Enforcement: Mission, Strategy, and Doctrine. School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 1993.

Lacquement, David B. Light Battalion Task Force Reconnaissance and Surveillance: Clear Vision or Groping In The Dark? School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 1990.

Reeder, William S. Jr. CAVALRY: yesterday, today, and tomorrow. Naval War College, Newport, RI, 1990. US Army. FM 17-95, Cavalry Operations. Washington, DC: Department of the Army, 1991.

Spara, Jeffery L. Peace-Enforcement and The United States Military For The Start of The 21st Century. School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 1993.

V. Discussions and Interviews.

Dorton, Jim LTC. "U.S. Army Peacekeeping Institute", Center for Strategic Leadership, U.S. Army War College, telephone conversation on 30 August 1993.

McCarthy, Kevin Major. USMC, Marine Amphibious Unit S-2 in Beirut, 1983; on 11 November 1993.